

## ABSTRACT

### MANUFACTURING A DENTAL IMPLANT DRILL GUIDE AND A DENTAL IMPLANT SUPERSTRUCTURE

Dental implant drill holes and the shape of a dental implant superstructure are chosen by creating a computer model giving jawbone structural details, gum surface shape information and proposed teeth or dental prosthesis shape information. The computer model shows the bone structure, gum surface and teeth images properly referenced to one another so that implant drill hole positions can be selected taking into consideration proper positioning within the bone as well as proper positioning with respect to the dental prosthesis. Similarly, manufacture of the dental implant superstructure used for fixed dental prosthesis or overdentures can be designed based on knowledge of the actual implant positions referenced to an image of the gum surface and proposed dental prosthesis.